

31

Date: Monday, 7/9/2007 3:48:56 PM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: FLOAT SKID ASSEMBLY		
Job Number	: 33442A		Part Number	: D412742043		
Estimate Number	: 10756		Drawing Number	: D3391 REV F		
P.O. Number	: N/A		Project Number	: N/A		
This Issue	: 7/9/2007 S.O. No. : N/A		Drawing Revision	: F		
Prsh Rev.	: NC		Material	: N/A		
First Issue	: N/A		Due Date	: 7/30/2007 Qty: 1 Um: Each		
Previous Run	: 33441A					
Written By						
Checked & Approved By						
Comment	: Est Rev A 05.10.13 New Issue		KJ/JLM			
	Est Rev B 06.02.13 ECN 773 dwg @ rev.D		EC			
	Est Rev:C 07-05-28 As per Rev F		JLM			

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	DC	DOCUMENT CONTROL	
	Comment: DOCUMENT CONTROL	If D412-742-043 is a W/O on its own, Photocopy bluefile and create labels per PPP D412-742-043 CHG003	<i>Packed w/ WO 33642</i>
2.0	D3391023	Mid Tube Assembly	
	Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)		
	pick:		
	X Qty 1 Part Number Description	Batch	
	D3391-023 Mid Tube Assembly	<u>B 31847</u>	<u>a.m 07.08.18</u>
3.0	D3391025	Aft Tube Assembly	
	Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)		
	pick:		
	X Qty 1 Part Number Description	Batch	
	D3391-025 Aft Tube Assembly	<u>833648</u>	<u>a.m 07.08.18 /</u>
4.0	D35641	WEARSHOE	
	Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)		
	WEARSHOE		
	Batch: <u>B 33243</u>		<u>a.m 07.08.18 F</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Seq. #:	Machine Or Operation:	Description :
5.0	D35643	WEARSHOE 
		Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) WEARSHOE Batch: <u>B 33744</u> a.m 07.08.18 /
6.0	D35645	WEARSHOE 
		Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) WEARSHOE Batch: <u>B 33802</u> a.m 07.08.18 /
7.0	D35661	GASKET 
		Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s) GASKET Batch: <u>B 33458</u> a.m 07.08.18 /
8.0	D35665	GASKET 
		Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) GASKET Batch: <u>B 33806</u> a.m 07.08.18 /
9.0	AN3C4A	BOLT 
		Comment: Qty.: 24.0000 Each(s)/Unit Total : 24.0000 Each(s) BOLT Batch: <u>m105057</u> a.m 07.08.18 /
10.0	AN3C6A	BOLT 
		Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s) BOLT Batch: <u>m103693</u> a.m 07.08.18 /
11.0	AN3C7A	BOLT 
		Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s) BOLT Batch: <u>m103668</u> a.m 07.08.18 /

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Job Number: 33442A

Part Number: D412742043

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

AN960C10L

washer



Comment: Qty.: 44.0000 Each(s)/Unit Total : 44.0000 Each(s)

washer

Batch: M105143

a.m 07.08.18

1

13.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Spray inside tube of D3391-021/-023/-025 with LPS-3 as per Dwg D3391

A/R LPS-3 m109/61

a.m 07.08.18

1

2-Install tubes together and seal them all the way around using Sikaflex 241/291. Ensure tube ends line-up with saddle holes for proper alignment, using 7/16" "T" Pins.

A/R Sikaflex-241/-291 m109/89

a.m 07.08.18

1

Expiry date: 08.01

3-Install wearplates as per Dwg D3391. Ensure that plastic washers are against wearplate, then topped with the SS washer. Coat bolts with LPS "procyon".

Seal all bolts with sikaflex except ones with inserts on inside of tube ,hand tighten only bolts with no sikaflex.

A/R LPS Procyon m104/251

A/R Sikaflex-241/-291 m109/89

a.m 07.08.18

1

Expiry date: 08.01

4-Remove "T" pins once sikaflex is dry. a.m 07.08.18

a.m 07.08.18

5-Coat all exposed hardware with LPS Procyon. Remove any excess off with MEK degreaser.

14.0

QC5

INSPECT WORK TO CURRENT STEP

(21)



Comment: INSPECT WORK TO CURRENT STEP

Er 07/08/20

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-742-043

Location: PPP 33555

PPP Rev: 07/08/210

EJ 07/08/210

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No  DQA: 7 Date: 07/09/22  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: FLOAT SKID ASSEMBLY

Job Number: 33442A

Part Number: D412742043

Job Number:



Seq. #: Machine Or Operation:

Description :

16.0 QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/08/22 17

Job Completion



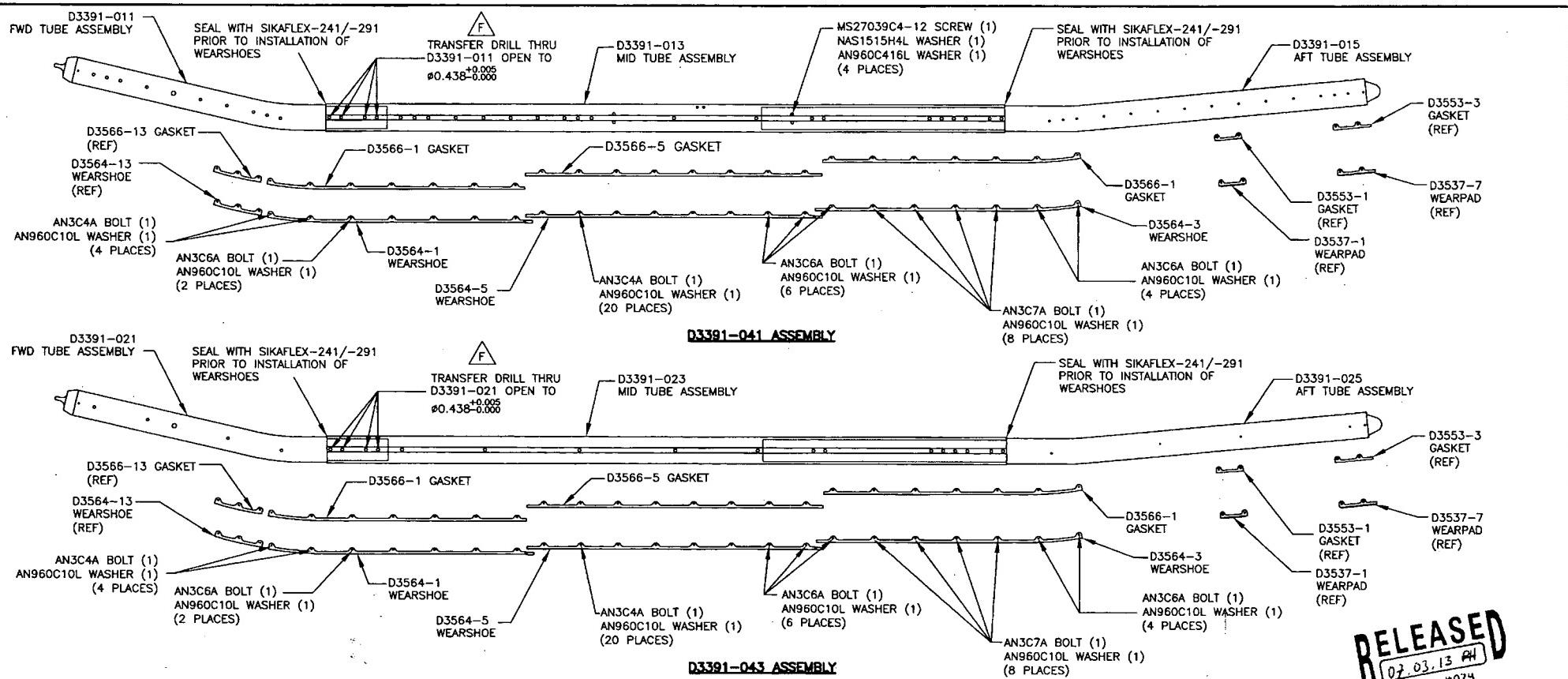
W 08/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



#### D3391-041/-043 FLOAT\_SKIDTUBE ASSEMBLY PARTS LIST

QTY	QTY	PART NUMBER	DESCRIPTION
X	043	D3391-041	FLOAT_SKIDTUBE ASSEMBLY
X		D3391-043	FLOAT_SKIDTUBE ASSEMBLY
1	1	D3391-011	FWD TUBE ASSEMBLY
1	1	D3391-013	MID TUBE ASSEMBLY
1	1	D3391-015	AFT TUBE ASSEMBLY
1	1	D3391-021	FWD TUBE ASSEMBLY
1	1	D3391-023	MID TUBE ASSEMBLY
1	1	D3391-025	AFT TUBE ASSEMBLY
1	1	D3564-1	WEARSHOE
1	1	D3564-3	WEARSHOE
1	1	D3564-5	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
24	24	AN3C4A	BOLT
12	12	AN3C6A	BOLT
8	8	AN960C10L	BOLT
44	44	AN960C10L	WASHER
4	4	MS27039C4-12	SCREW
4	4	NAS1515H4L	WASHER
4	4	AN960C416L	WASHER

#### GENERAL NOTES

- 1) ALL DIMENSIONS ARE IN INCHES
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 4) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH  
AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH  
LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS  
OFF POWDER COATING WITH MEK DEGREASER.
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL 'E' SIZE HOLES ( $\phi 0.250$ - $\phi 0.257$ )  
FOR WEARSHOE INSERTS. C'SINK  $\phi 0.391$ / $\phi 0.425$  x 100° AS APPLICABLE AND  
INSTALL INSERTS EXCEPT WHERE INDICATED.

NO 33342-A  
 CONTROLLED COPY  
 ENGINEERING  
 RETURN TO  
 D.C.  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NTS

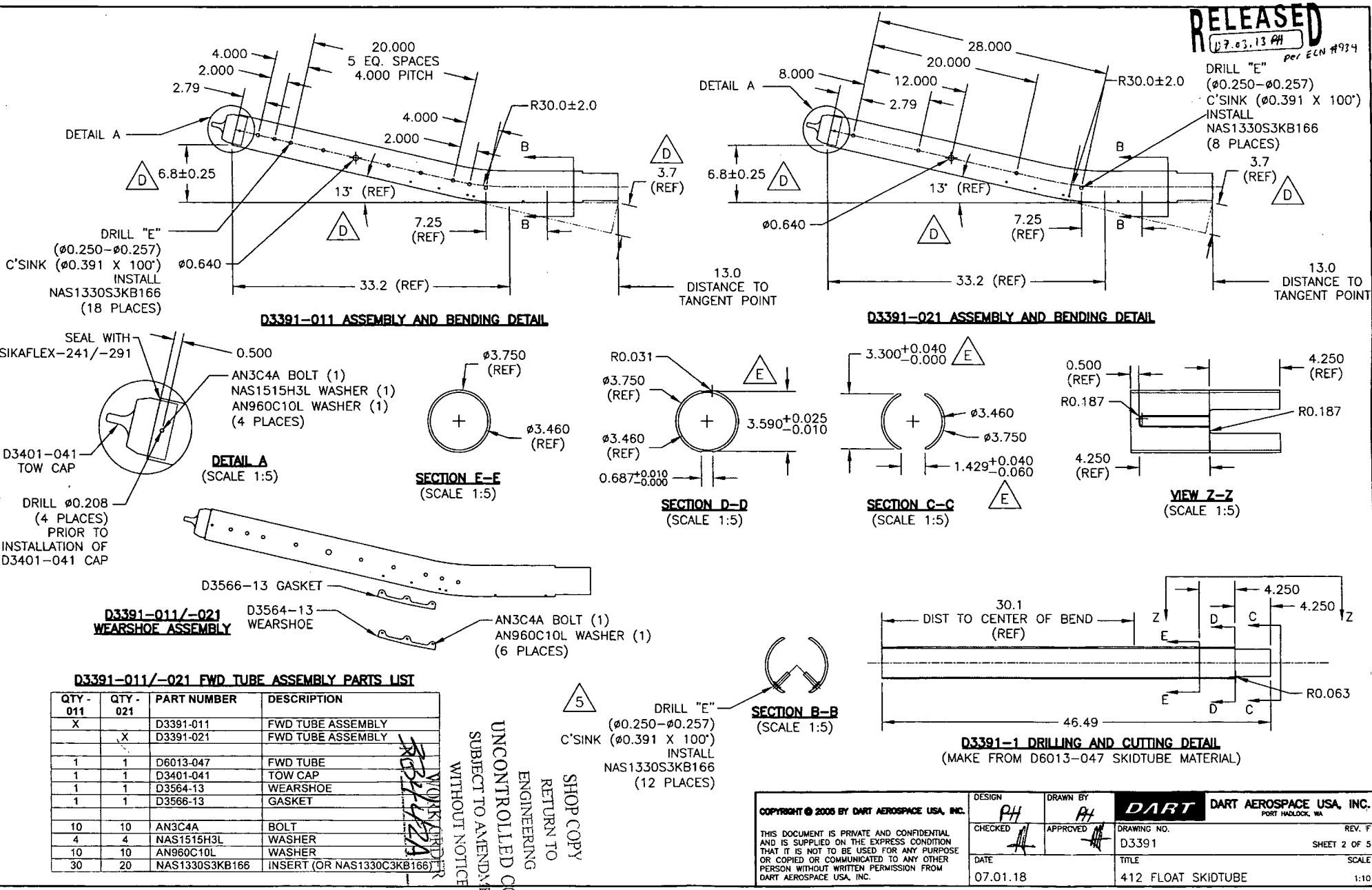
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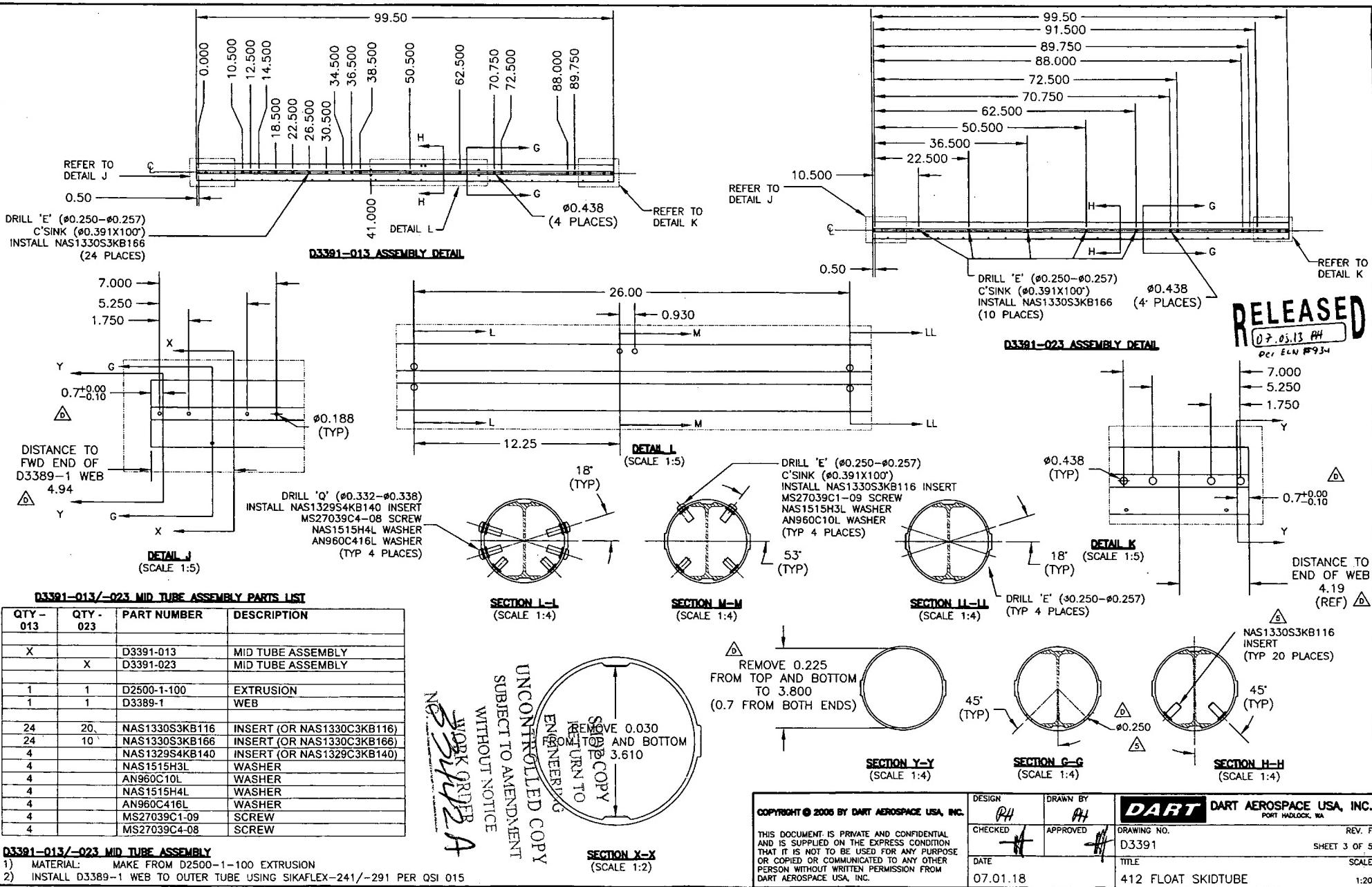
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CHECKED <i>[initials]</i>	APPROVED <i>[initials]</i>	DRAWING NO.	REV. F D3391
DATE 07.01.18	TITLE 412 FLOAT_SKIDTUBE	SCALE	SHEET 1 OF 5

RELEASED  
07.03.15 PH  
per E.CN #934

**RELEASED**  
07.03.13 AM  
per ECN #934





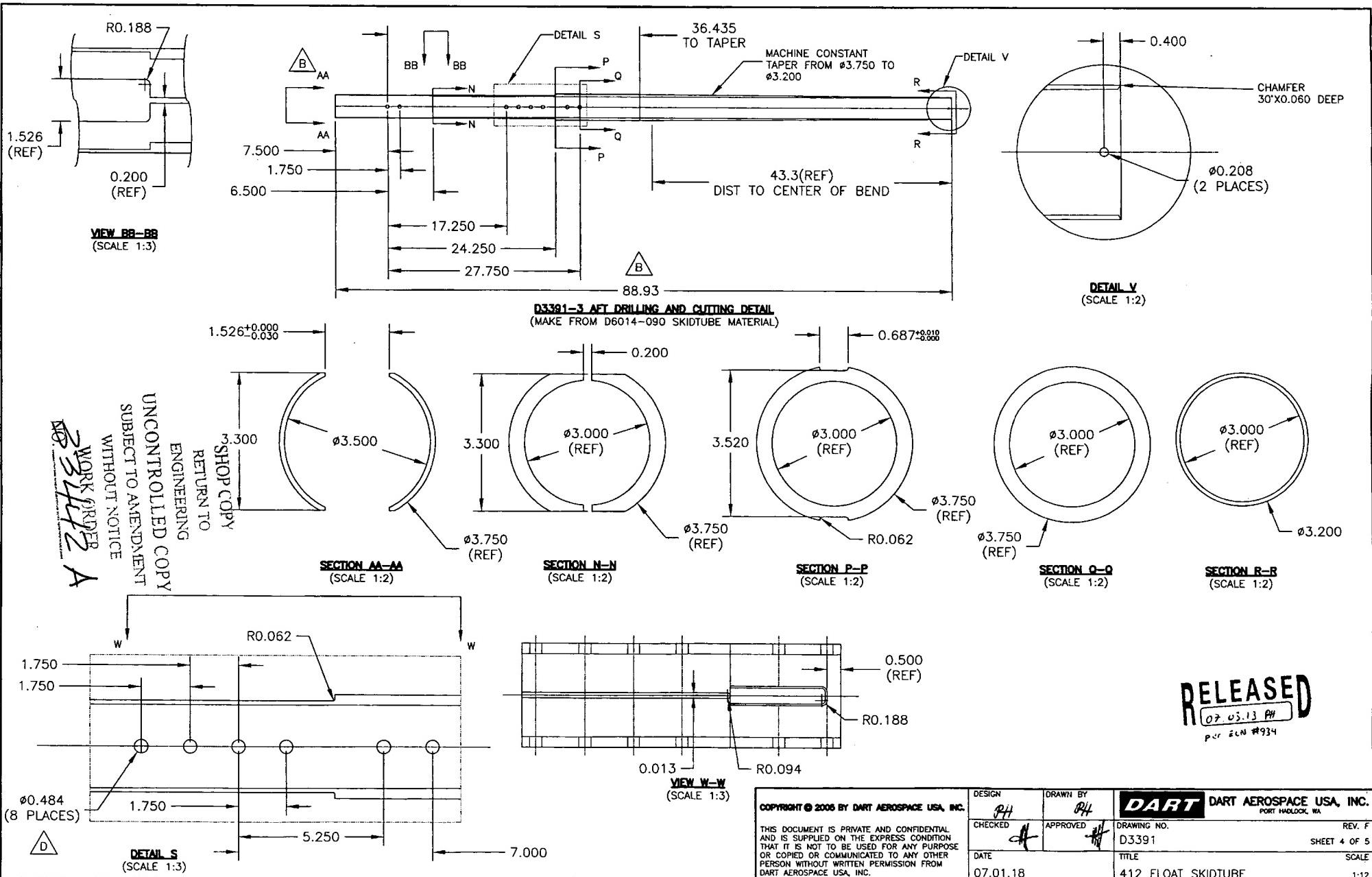
D3391-013/-023 MID TUBE ASSEMBLY

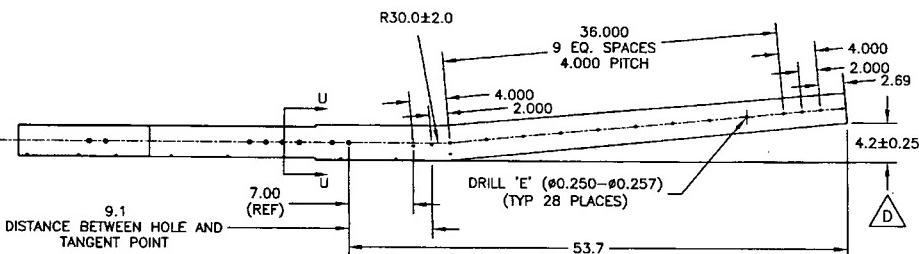
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION  
2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015

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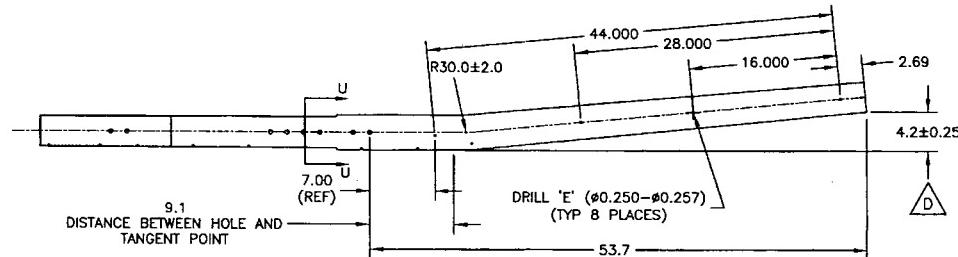
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DATE 07.01.18	TITLE 412 FLOAT SKIDTUBE	SCALE 1:20	

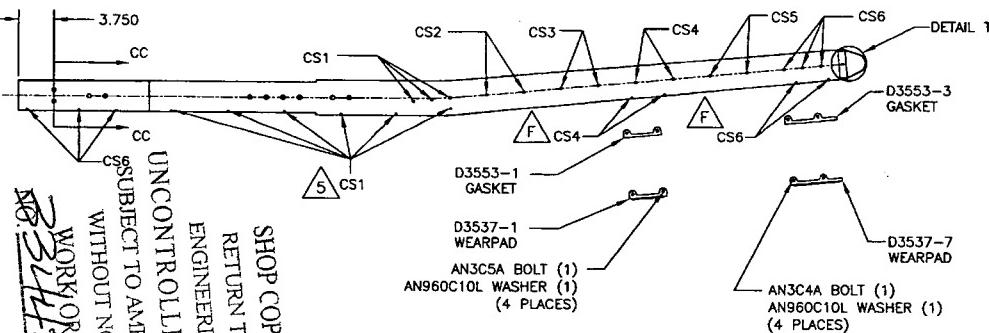




D3391-015 BENDING AND ASSEMBLY DETAIL



D3391-025 BENDING AND ASSEMBLY DETAIL



D3391-015 INSERT AND WEARPAD INSTALLATION DETAIL  
(SEE TABLE)

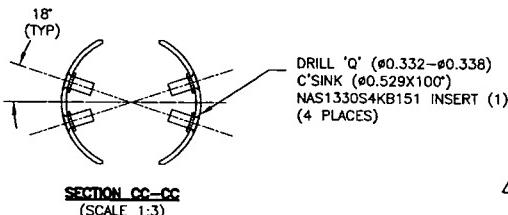
R3391-025  
WORK ORDER SUBJECT TO AMENDMENT  
ENGINEERING RETURN TO  
UNCONTROLLED COPY  
WITHOUT NOTICE

D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST

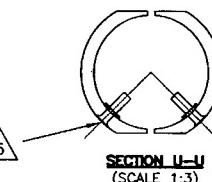
QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X		D3391-015	AFT TUBE ASSEMBLY
X		D3391-025	AFT TUBE ASSEMBLY
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
1	1	D3537-1	WEARPAD
1	1	D3537-7	WEARPAD
1	1	D3553-1	GASKET
1	1	D3553-3	GASKET
18	14	NAS1330S3KB366	INSERT (OR AES10KB366)
4	2	NAS1330S3KB316	INSERT (OR NAS1330C3KB316)
8	6	NAS1330S3KB266	INSERT (OR NAS1330C3KB266)
4		NAS1330S3KB216	INSERT (OR NAS1330C3KB216)
16	12	NAS1330S3KB166	INSERT (OR NAS1330C3KB166)
4		NAS1330S4KB151	INSERT (OR NAS1330C4KB151)
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
2	2	NAS1515H3L	WASHER
10	10	AN960C10L	WASHER

C'SINK AND INSTALL NAS1330S3KBXXX IN HOLES MARKED CS1-CS6 AS FOLLOWS

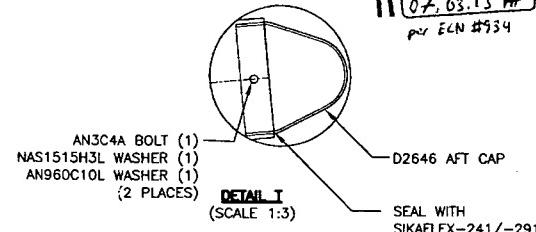
HOLES MARKED	QTY D3391-015	QTY D3391-025	C'SINK	P/N
CS1	18	14	Ø0.425	NAS1330S3KB366
CS2	4		Ø0.391	NAS1330S3KB366
CS3	4	2	Ø0.391	NAS1330S3KB316
CS4	8	6	Ø0.391	NAS1330S3KB266
CS5	4		Ø0.391	NAS1330S3KB216
CS6	16	12	Ø0.391	NAS1330S3KB166



SECTION CC-CC  
(SCALE 1:3)



SECTION U-U  
(SCALE 1:3)



DETAIL T  
(SCALE 1:3)

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CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. D3391	REV. F
DATE 07.01.18	TITLE 412 FLOAT SKIDTUBE	SCALE 1:12	SHEET 5 OF 5